

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A composition comprising a conjugate of a photosensitiser and a bacteriophage.
2. (original) A composition according to claim 1, wherein the bacteriophage is a staphylococcal bacteriophage.
3. (currently amended) A composition according to claim 1 ~~or 2~~, wherein the photosensitiser is covalently linked to the bacteriophage.
4. (currently amended) A composition according to ~~any of claims 1 to 3~~ claim 1, wherein the photosensitiser is chosen from Porphyrins, phthalocyanines, chlorins, bacteriochlorins, phenothiaziniums, phenazines, acridines, texaphyrins, cyanines, anthracyclins, pheophorbides, sapphyrins, fullerene, halogenated xanthenes, perylenequinonoid pigments, gilvocarcins, terthiophenes, benzophenanthridines, psoralens and riboflavin.
5. (original) A composition according to claim 4, wherein the photosensitiser is tin (IV) chlorin e6 (SnCe6).

6. (currently amended) A composition according to ~~any of the preceding claims~~ claim 1, wherein the bacteriophage is chosen from phage 53, 75, 79, 80, 83, ϕ 11, ϕ 12, ϕ 13, ϕ 147, ϕ MR11, 48, 71, ϕ 812, SK311, ϕ 131, SB-I, U16, C₁, SF370.1, SP24, SFL, A1, ATCC 12202-B1, f304L, ϕ 304S, ϕ 15, ϕ 16, 782, P1clr100KM, P1, T1, T3, T4, T7 MS2, P1, M13, UNL-1, ACQ, UT1, tbalD3, E79, F8, pf20 B3, F116, G101, B86, T7M, ACq, UT1, BLB, PP7, ATCC 29399-B1 and B40-8.

7. (original) A composition according to claim 6, wherein the bacteriophage is phage 75 or phage Φ 11.

8. (currently amended) A composition according to ~~any of the preceding claims~~ claim 1, wherein the concentration of the photosensitiser is from 0.01 to 200 μ g/ml.

9. (currently amended) A composition according to ~~any of the preceding claims~~ claim 1, wherein the concentration of the bacteriophage is from 1×10^5 to 1×10^{10} pfu/ml.

10. (currently amended) A composition according to ~~any of the preceding claims~~ claim 1, which further comprises a source of Ca^{2+} ions, preferably calcium chloride.

11. (currently amended) A composition according to ~~any of claims 1 to 10~~ claim 1, in the form of a solution in a pharmaceutically acceptable carrier.

12. (currently amended) A composition according to ~~any of claims 1 to 11~~ claim 1, wherein the composition further comprises one or more of a buffer, salt, antioxidant, preservative, gelling agent or remineralisation agent.

13. (currently amended) A method of killing bacteria, comprising
(a) contacting an area to be treated with a composition according to ~~any of the preceding claims~~ claim 1, such that any bacteria present bind to the photosensitiser-bacteriophage conjugate; and
(b) irradiating the area with light at a wavelength absorbed by the photosensitiser.

14. (original) A method according to claim 13, wherein the bacteria are staphylococcus, particularly MRSA, EMRSA VRSA, hetero-VRSA or CA-MRSA.

15. (currently amended) A method according to ~~any of claims 13 or 14~~ claim 13, wherein the light is laser light or white light.

16. (original) A method according to claim 15, wherein the laser light is from a helium neon gas laser.

17. (currently amended) A method according to ~~any of claims 15 or 16~~ claim 15, wherein the laser light has a wavelength of from 200 to 1060nm.

18. (currently amended) A method according to ~~any of claims 15 to 17~~ claim 15, wherein the laser has a power of from 1 to 100mW and a beam diameter of from 1 to 10mm.

19. (original) A method according to claim 19, wherein the light dose of laser irradiation is from 5 to 333 Jcm⁻².

20. (original) A method according to claim 15, wherein the light dose of white light is from 0.01 to 100 kJ/cm².

21. (currently amended) A method according to ~~any of claims 15 to 20~~ claim 15, wherein the duration of irradiation is form one second to 15 minutes.

22. (currently amended) A method according to ~~any of claims 13 to 21~~ claim 13, wherein the composition is present in or on the area to be treated at a concentration of from 0.00001 to 1% w/v.

23. (currently amended) Use of a composition according to ~~any of claims 1 to 12~~ claim 1, for treatment of the human or animal body.

24. (currently amended) Use of a composition according to ~~any of claims 1 to 12~~ claim 1, in the manufacture of a medicament for treatment of bacterial infection.

25. (original) Use according to claim 24, wherein the bacterial infection is *S. aureus*, particularly MRSA, EMRSA, VRSA, hetero-VRSA or CAMRSA.

26. (original) Use of a bacteriophage as a targeting agent in photodynamic therapy (PDT).

27. (original) Use according to claim 26, wherein the bacteriophage is a staphylococcal phage.

28. (currently amended) A composition according to ~~any of claims 1 to 12~~ claim 1, substantially as described in the Examples.

29. (currently amended) A method according to ~~any of claims 13 to 22~~ claim 13, substantially as describe in the Examples.

30. (currently amended) A use according to ~~any of claims 23 to 27~~ claim 23, substantially as described in the Examples.